

City of Bee Cave

Storm Water Management Program

Phase II (Small) MS4 Annual Report

Permit Year 3 (2016)



4000 Galleria Parkway
Bee Cave, TX 78738



Phase II (Small) MS4 Annual Report Form

TPDES General Permit Number TXR040000

A. General Information

Authorization Number: TXR040453

Reporting Year (year will be either 1, 2, 3, 4, or 5): 3

Annual Reporting Year Option Selected by MS4:

Calendar Year X

Permit Year _____

Fiscal Year: _____ Last day of fiscal year: (_____) _____

Reporting period beginning date: (month/date/year) 01/01/2016

Reporting period end date: (month/date/year) 12/31/2016

MS4 Operator Level: 1 Name of MS4: City of Bee Cave

Contact Name: Lindsey Oskoui Telephone Number: 512 767 6677

Mailing Address: 4000 Galleria Parkway, Bee Cave, TX 78738

E-mail Address: loskoui@beecavetexas.gov

A copy of the annual report was submitted to the TCEQ Region: YES X NO _____

Region the annual report was submitted: TCEQ Region 11

B. Status of Compliance with the MS4 GP and SWMP

1. Provide information on the status of complying with permit conditions:
(TXR040000 Part IV Section B.2.):

	Yes	No	Explain
Permittee is currently in compliance with the SWMP as submitted to and approved by the TCEQ.	X		Approval and coverage effective as of 03/10/15. Received Year 2 Annual Report review confirmation on 09/27/2016. The City has met goals for permit year 3.

Permittee is currently in compliance with recordkeeping and reporting requirements.	X	The City is in compliance with recordkeeping and reporting.
Permittee meets the eligibility requirements of the permit (e.g., TMDL requirements, Edwards Aquifer limitations, compliance history, etc.)	X	TMDL requirement is not warranted. The City met all applicable requirements.

2. Provide a general assessment of the appropriateness of the selected BMPs. You may use the table below **(See Example 1 in instructions)**:

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1	1. Distribute Educational Material	Yes - Administratively approved by TCEQ and appropriate for Public Education, Outreach, and Involvement. City has identified target audience and summarized plan of action, acquired educational materials from different sources including EPA and TCEQ. City has also prepared brochures for stormwater quality issues which are available in hard copy at the Planning & Development Department front desk window. We also include them at the time of site and building permit issuance. City has started distributing such materials to the general citizen through the City's constant contact and Homeowner's Association distribution lists. Educational materials are available in City's website including a dedicated MS4 page explaining the importance of clean stormwater and tips for citizens on how to positively contribute. Furthermore, City is utilizing digital tools for public education and awareness. On our digital message board, we have been displaying eight (8) slides about stormwater, which are on continuous rotation during business hours. The slides are included under Appendix 'A'. These efforts are part of City's awareness campaign towards reducing the discharge of pollutants in stormwater.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
1	2.Web Site	Yes – Administratively approved by TCEQ and appropriate for Public Education, Outreach, and Involvement. City has developed stormwater related content. The SWMP, previous annual report, stormwater quality educational information including useful links to outside agencies, and water quality pond map are available on the City website; under a new page completely dedicated to MS4 compliance. A section for 'Frequently Asked Questions and Answers' is added too. This page provides a source of information for citizen and helps City in improving awareness about adverse impacts of pollutant discharge.
1/2/3	3.Stormwater Reporting Line	Yes - Administratively approved by TCEQ and appropriate for Public Education, Outreach, and Involvement; Illicit Discharge and Elimination, and Construction Site Runoff Control. City has identified and summarized plan of action. A reporting line (phone and e-mail address) has been established. Reporting form and contact information is available in the City's website. City has developed internal procedures for receiving calls/e-mails, documentation of incidents/complaints and corrective actions, dispatching to appropriate personnel/inspector, and communicating with responsible parties to resolve any issues. This streamlined process is facilitating the incidence of reporting and remedial actions within shortest period of time.
1	4. Waste Cleanup	Yes - Administratively approved by TCEQ and appropriate for Public Education, Outreach, and Involvement. City has identified process and summarized plan of action. City is part of the Lake Travis Regional Re-use and Recycling Center (LTRRRC). The center receives household products and hazardous waste on scheduled events. Three such scheduled collection events took place in 2016. Appendix 'B' contains information of types and amount of materials collected in 2016. This arrangement is adequately supporting the waste cleanup requirements.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
2	5. Illicit Discharge Prohibition/Elimination Ordinance	Yes - Administratively approved by TCEQ and appropriate for Illicit Discharge Detection and Elimination. Current City code (under Section 20) is sufficient for detection and elimination of illicit discharge. It specifies all requirements including NPDES/TPDES permits and appropriate prohibitions. The enforcement of code is the mechanism for City to achieve the goal to prevent illicit discharge.
2	6. Storm Sewer System Map	Yes - Administratively approved by TCEQ and appropriate for Illicit Discharge Detection and Elimination. City has created a GIS dataset and corresponding map for location of water quality ponds (/outfalls) and related infrastructure as well as surface water bodies. The map is attached with this report under Appendix 'C'. The map identifies water quality ponds and roadways (for inlets) by responsible parties for maintenance. Staff can communicate with appropriate parties using information in internal database if situation arises to address concern immediately.
2	7. Illicit Discharge Detection and Elimination (IDDE) Training	Yes - Administratively approved by TCEQ and appropriate for Illicit Discharge and Elimination. City has identified personnel who need to attend trainings, including plan reviewers, building inspectors, code enforcement officers, and administrative staff that play a role in the stormwater reporting line. Trainings help staffs to be familiar with different aspects of MS4 and stormwater quality requirements and staff is utilizing gained knowledge in review and daily inspection activities.
2	8. IDDE Response, Investigation, and Inspections	Yes - Administratively approved by TCEQ and appropriate for Illicit Discharge and Elimination. City has procedure policy in place for IDDE response, field investigation, and inspection to identify the source of discharge, elimination of the discharge, and enforcing corrective measures within shortest possible period of time. In 2016, City has received 1 complaint. Staffs inspected, traced the source and, oversaw action to remove those sources accordingly.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
2	9. Spill Response	Yes - Administratively approved by TCEQ and appropriate for Illicit Discharge Detection and Elimination. City has a spill response procedure in place. In case of spill, City's Police Department and Lake Travis Fire and Rescue are the first and primary responders. There was no spill incident within City's jurisdiction in 2016.
2	10. Erosion Control Ordinance and Requirements for Construction Site Contractors	Yes - Administratively approved by TCEQ and appropriate for Construction Site Runoff Control. City's current Code of Ordinance has sufficient provisions for erosion and sedimentation controls requirements for construction sites. An approved erosion and sedimentation control plan is a requirement for issuance of a Site Permit. Upon commencement of a project, the City regularly monitors construction activities, immediately communicates with contractors and developers when inspectors observe controls are not being properly maintained and enforces via stop work orders in instances of initial non-responsiveness. This process of enforcement ensures strict compliance with stormwater regulations.
3	11. Erosion Control Plan Review	Yes - Administratively approved by TCEQ and appropriate for Construction Site Runoff Control. City's current Code of Ordinance requires erosion and sedimentation control plan as part of site development plan set and staff review such plan on site specific basis prior to permitting any land disturbing activities. Staff inspects the site before the pre-construction meeting to verify sufficiency of protective measures.
3	12. Construction Site Inspection and Enforcement	Yes - Administratively approved by TCEQ and appropriate for Construction Site Runoff Control. City receives SW3P inspection report weekly and after every 0.5" rainfall events. Staff generally visits active site on a routine basis. Staff also visits sites with issues frequently. Three (3) City staff has made approximately 200 visits in 2016. There is a reduction (as observed and evaluated) of stormwater quality issues in construction site during 2016 than the previous years.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
3	13. Engineering and Construction Staff Training	Yes - Administratively approved by TCEQ and appropriate for Construction Site Runoff Control. Staff has attended in relevant seminars and webinars offered by different organizations. Such trainings help staff in inspection of construction sites, understanding the issues, identifying the source, finding out the appropriate solutions, and formulating enforcement of appropriate measures (if necessary) to ensure discharge of pollutants does not travel towards waterbodies.
4	14. Post-Construction Stormwater Ordinance	Yes - Administratively approved by TCEQ and appropriate for Post-Construction Stormwater Management. Current City Code of Ordinance contains sufficient provisions. Staff visits the site at the end of construction and then annually for 2 years to visually verify the condition of permanent stabilization. Furthermore, staffs conducts inspection of the permanent water quality control facilities (/ponds) annually and notify the responsible party if any maintenance is required and enforce such maintenance. Additionally, City requires the responsible parties to conduct a functionality inspection once in every 5 years to ensure those facilities are working in intended manner and to identify if any adjustments/maintenance works are necessary to improve functionality. All these procedures and measures help City in achieving higher water quality control standards and limit any pollutants leaving sites.
4	15. Development Review	Yes - Administratively approved by TCEQ and appropriate for Post-Construction Stormwater Management. Site development plan includes sheets for erosion and sedimentation control plan, temporary and permanent stabilization, tree protections, storm sewer plan, water quality control plans etc. which staff review prior to proceed for approval. The review ensure that the site will be in general conformance with stormwater regulations during and after construction, and the development will have appropriate water quality control to meet the higher level of pollutant removal requirements established by the City.

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
4	16. Structural Control Maintenance	<p>Yes - Administratively approved by TCEQ and appropriate for Post-Construction Stormwater Management. Current City Code of Ordinance requires a 'Maintenance Plan' for all structural water quality control facilities. As part of an annual inspection process, staff visits the subject facilities, notifies the responsible parties of our findings, and enforces maintenance when necessary. Staff visited 80 facilities in 2016, of which seven required more than routine maintenance. Formal 'Notices of Violation' were sent to two; others were notified via e-mail. Maintenance activities are currently undergoing. These annual inspections are ensuring long-term operation and maintenance which is key to maintain stormwater quality. Additionally, City has adopted an ordinance (in 2015) requiring functionality inspection once in every 5 years. This ordinance requires a licensed professional visit the facilities and submit a report to City listing conditions observed and any maintenance that are necessary. City then enforce the operator to complete any such maintenance activities to ensure that those facilities are performing their functions and there is no increase in pollutant loads. These procedures are adequate to reduce pollutant discharge from any developed site.</p>
5	17. Inventory of Facilities and Stormwater Controls	<p>Yes - Administratively approved by TCEQ and appropriate for pollution prevention and good housekeeping. City has the inventory of all publicly owned and operated facilities. City also has inventory for privately maintained stormwater quality control facilities. This inventory is essential to identify responsible parties, and resolve issues quickly.</p>
5	18. Employee Training	<p>Yes - Administratively approved by TCEQ and appropriate for Pollution Prevention and Good Housekeeping. City has identified municipal operations that have potential to impact stormwater. City's maintenance employees have sufficient experience in municipal operations and maintenance activities while implementing pollution prevention and good housekeeping practices.</p>

MCM(s)	BMP	BMP is appropriate for reducing the discharge of pollutants in stormwater (Answer Yes or No, and explain.)
5	19. Disposal of Collected Waste	Yes - Administratively approved by TCEQ and appropriate for Pollution Prevention and Good Housekeeping. City has properly disposed collected waste to comply with all applicable requirements.
5	20. Contractor Oversight Procedures	Yes - Administratively approved by TCEQ and appropriate for Pollution Prevention and Good Housekeeping. Staffs are in regular communication with contractor's site supervisors to address any issues. Staff explains all stormwater related facts, restrictions, and necessary measures during pre-construction meeting and subsequent site visits so that contractor is aware of stormwater requirements and make their best efforts to eliminate any potential discharge. City is currently developing oversight procedures and it will be implemented duly.
5	21. Municipal Operations and Maintenance Activities	Yes - Administratively approved by TCEQ and appropriate for Pollution Prevention and Good Housekeeping. City has identified activities and procedures for regular maintenance activities. Appropriate pollution prevention and housekeeping measures are in place. Maintenance crews are mindful of restrictions and requirements. City currently has no facilities regulated by TXR050000 for industrial stormwater discharge.
None	22. Edwards Aquifer Contributing Zone	Yes - Administratively approved by TCEQ and appropriate for the Edwards Aquifer Rule. City has been following and implementing all relevant rules for years.

3. Describe progress towards reducing the discharge of pollutants to the maximum extent practicable. Summarize any information used (such as visual observation, amount of materials removed or prevented from entering the MS4, or if required monitoring data, etc.) to evaluate reductions in the discharge of pollutants. You may use the table (**See Example 2 in instructions**):

M C M	BMP	Information Used	Quantity	Units	Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)
1	1.2 Website	Digital media			No. Though this BMP does not result in a direct reduction of pollutants, educating the citizens will eventually reduce litter, hence pollutants.
1, 2, 3	1.3, 2.3, 3.3 Stormwater Reporting Line	City website and other communication tools			No. But, the streamlined reporting line and rapid action plan reduce potential travels of pollutants to water bodies.
1	1.4 Waste Cleanup	Collection center	3	Events	Yes. The collection of household and hazardous materials reduces potential dumping of some of those materials.
2	2.5 Illicit Discharge Prohibition/ Elimination Ordinance	City Code of Ordinance			Yes. Existing ordinance specifies all requirements including NPDES/TPDES permits and appropriate prohibitions. It ensures reducing illicit discharge.
2	2.6 Storm Sewer System Map	Outfalls	New: 4 Total: 84	Inspections	Yes. If illicit discharges are observed, immediate actions can be taken to remove the pollutant and track the sources.
2	2.7 Illicit Discharge Detection and Elimination (IDDE) Training	Training	5	Number (Seminar and Webinar)	Yes. Staff acquired in depth knowledge about illicit discharge, source identification, procedures of resolution etc. all of which are essential to reduce non-point source pollutants and improve stormwater quality.

M C M	BMP	Information Used	Quantity	Units	Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)
2	2.8 IDDE Response, Investigation, and Inspections		1	Inspecti ons	Yes. Staff has inspected sites whenever necessary and investigated issues in order to reduce discharge of pollutants. There was no incident of sewage leakage in last 6 years.
3	3.10 Erosion Control Ordinance and Requirements for Construction Site Contractors	City Code of Ordinance			Yes. Adequate levels of erosion and sedimentation controls measures are implemented in construction sites to reduce pollutants leaving the sites.
3	3.11 Erosion Control Plan Review		24	Projects	Yes. Review of erosion and sedimentation control plan directly contribute reducing pollutants leaving the construction sites and achieving final stabilization in all disturbed areas.
3	3.12 Construction Site Inspection and Enforcement		200 (approximate)	Inspecti ons	Yes. Staff has inspected residential and non-residential sites to check sufficiency of erosion and sedimentation controls and whether any adjustment is necessary to reduce erosion and sediment discharge from sites.

M C M	BMP	Information Used	Quantity	Units	Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)
3	3.13 Engineering and Construction Staff Training		22	Number (Seminar and Webinar)	Yes. Training provides staff insights of construction sites, issues, and possible and feasible solution which staff utilizes during communication with contractors to reduce construction site stormwater runoff.
4	4.14 Post- Construction Stormwater Ordinance		10	Inspecti ons	Yes. Staff inspected developed projects annually for first two years to check compliance and find out any issues. This is to make sure that there is no pollution source. City's current NPS ordinance requires permanent water quality facilities that are capable to achieve minimum 95% pollutant removal on-site in developed condition. There are many retention-irrigation systems in place which can theoretically achieve 100% pollutant removal.
4	4.15 Development Review	City Code of Ordinance	24		Yes. Development review provides staff the overall development scenarios. Staff made necessary comments in an attempt to reduce pollutants and achieve higher standards mandated by City ordinance.
4, 5	4.16 and 5.16 Structural Control Maintenance	City Code of Ordinance	80	Inspecti ons	Yes. Staff inspected developed projects annually to check water quality ponds are properly maintained. This step ensures performance of those facilities which is integral part of process for reduction of pollutants.

M C M	BMP	Information Used	Quantity	Units	Does the BMP Demonstrate a Direct Reduction in Pollutants? (Answer Yes or No, and explain.)
5	5.19 Disposal of collected waste				Yes. City has properly disposed all collected waste via its service provider which ensures reduction of pollutants.
5	5.20 Contractor oversight procedures		22	Person	Yes. By regular communication via e-mail and phone, and inspecting the construction sites, staff have evaluated if proper best management practices are being utilized.
5	5.21 Municipal Operations and Maintenance Activities				Yes. City and its service providers implemented necessary measures for pollution prevention and good housekeeping practices to reduce pollutants. Given the size of the City and the scope of its municipal services, we undertake relatively few activities that have a stormwater component. However, where there is overlap we implement best practices into our procedures. For example, in all of our parks we provide trash receptacles and dog waste stations, which we empty and provide supplies to on a daily basis. We bring our fleet vehicles to be washed and serviced at facilities that implement water re-use practices state-mandated safe disposal practices. And we provide single stream recycling receptacles at all municipal buildings.

4. Provide the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals (**See Example 3 in instructions**):

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
MCM 1 BMP 1. Distribute Educational Material	<p>Research and acquire available stormwater educational material applicable to the identified stormwater quality issues.</p> <p>Distribute stormwater quality educational information to public employees, businesses, and the general public a minimum of once per year.</p>	<p>Met Goal - City has identified and summarized a plan of action and acquired educational materials from different sources including EPA and TCEQ. City has also prepared brochures for stormwater quality issues. City has started distributing such materials to the general citizen with the help of Home and Property Owners Association etc. Furthermore, City is utilizing digital tools for public education and increasing awareness. For example, City is using monitor display in City Hall (see Appendix 'A') for awareness information. City will take additional steps for materials distribution in 2017.</p>
MCM 1 BMP 2.Web Site	<p>Develop stormwater-related content on the City's web site with educational information, links, and references for additional information. Solicit input and feedback from the public for stormwater quality issues and opportunities in the City.</p>	<p>Met Goal - City has developed stormwater related contents. The SWMP, previous annual report, stormwater quality educational information, water quality pond map are added in the City website under a new page completely dedicated to MS4 compliance (http://www.beecavetexas.com/city-government/departments/planning-development/engineering/municipal-separate-storm-sewer-system-ms4). City has asked for input and feedback from the public for non-point source pollution control issues.</p>

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
MCMs 1/2/3 BMP 3.Stormwater Reporting Line	Develop written procedures for receiving calls or input. The procedures should include details addressing documentation, dispatching to appropriate personnel, and an annual review of the program.	Met Goal - City has developed internal procedures for receiving calls/e-mails, documentation of incidents/complaints and corrective actions, dispatching to appropriate personnel/inspector, and communicating with responsible parties to resolve any issues. A reporting line (phone and e-mail) has been established. Reporting form and contact information is available in the City's website. City has received multiple calls and took appropriate steps immediately.
MCM 1 BMP 4. Waste Cleanup	Begin offering waste cleanup activities (e.g., bulk waste cleanup, household hazardous waste collection, park cleanup). Evaluate opportunities and public receptiveness for additional waste cleanup activities.	Met Goal - City is part of the Lake Travis Regional Re-use and Recycling Center (LTRRRC). The center receives household products and hazardous waste on scheduled events. Three (3) such scheduled collection events took place in 2016. Appendix 'B' contains information on materials collected in 2016.
MCM 2 BMP 5.Illicit Discharge Prohibition/ Elimination Ordinance	If necessary, begin finalizing revised/new illicit discharge prohibition ordinance for public. Consider soliciting input from the public for the draft ordinance. Conduct education activities, as needed, to inform the public about new ordinance requirements.	Met Goal - Current City code (under Section 20) is sufficient for detection and elimination of illicit discharge. It specifies all requirements including NPDES/TPDES permits and appropriate prohibitions. MS4 page in City's website contain public awareness information. Developers and contractors are notified of restrictions and requirements.
MCM 2 BMP 6. Storm Sewer	Begin identification of regulated stormwater outfalls in the City and the names and locations of all waters of the	Met Goal - City has created map for location of water quality ponds and related infrastructure as well as surface water bodies. The map is

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
System Map	U.S. receiving discharges from the MS4.	attached (Appendix C) with this report. The map identifies water quality ponds and roadways (for inlets) by responsible parties for maintenance. Staff can communicate directly with appropriate parties using information in internal database if situation arises to address concern immediately.
MCM 2 BMP 7. Illicit Discharge Detection and Elimination (IDDE) Training	Develop written procedures for IDDE training. The procedures will include a summary of the action, the responsible personnel, and the type and frequency of training.	Exceeded Goal - Staff has attended in relevant seminars and webinars offered by different organizations including ASCE, EWRI, EnviroCert, Forester University, NCTCOG, APA etc. A training log is included under Appendix 'D'.
MCM 2 BMP 8. IDDE Response, Investigation , and Inspections	<p>Develop written procedures for responding to illicit discharges, field investigations to identify the source of the discharge, elimination of the discharge, enforcing the corrective action of the responsible party, reporting to TCEQ if a threat to human health or the environment is detected , and performing scheduled inspections.</p> <p>Prioritize the investigation of discharges based on relative risk of pollution.</p> <p>Develop a standard report template to be completed after</p>	<p>Exceeded Goal - City has procedure policy in place for IDDE response, field investigation, and inspection to identify the source of discharge, elimination of the discharge, and enforcing corrective measures within shortest possible period of time. In 2016, City has received only 1 complaint which was addressed.</p> <p>The procedure includes process for source investigation and elimination. It requires City will prioritize investigation of discharge based on their relative risk of pollution. For example, sanitary sewage and chemical/pol spill will be considered a high priority discharge.</p>

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
	each investigation/inspection that documents the date(s) the illicit discharge was observed, the methods used to eliminate the discharge, and the date the incident was resolved.	City has a standard 'environmental inspection report' form that staff uses during site visit to list all observations and data collection. Appendix 'E' includes template for report that staff generally uses.
MCM 2 BMP 9. Spill Response	Continue implementation of spill response procedures and training through the Fire Department. Evaluate existing spill response procedures and training, and modify as necessary to protect water quality.	Met Goal - City has spill response procedure in place. In case of spill, City's Police Department and Lake Travis Fire and Rescue will take appropriate action. There was no spill incident within City's jurisdiction in 2016.
MCM 3 BMP 10. Erosion Control Ordinance and Requirements for Construction Site Contractors	<p>If necessary, begin finalizing revised/new ordinance for public review and comment. Solicit input from the public for the draft ordinance.</p> <p>Conduct educational activities, as needed, to inform the public about the new ordinance requirements.</p> <p>Monitor erosion and sediment controls, soil stabilization, and BMPs through established procedures. Monitor prohibited discharges through established procedures.</p>	Exceeded Goal - City's current Code of Ordinance has sufficient provisions for erosion and sedimentation controls requirements for construction sites. City regularly monitors construction activities, communicates with contractors and developers, and enforce as necessary time to time. There has been a reduction of erosion and sedimentation events in construction sites.
MCM 3 BMP 11. Erosion Control Plan Review	Modify the construction site plan review procedures, as needed, to consider potential water quality impacts and site specific erosion and sediment control measures.	Met Goal - City's current Code of Ordinance requires erosion and sedimentation control plan as part of site development plan set and staff review such plan on site specific basis prior to permitting any land disturbing

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
		activities. Staff inspects the site before the pre-construction meeting to verify sufficiency of protective measures.
MCM 3 BMP 12. Construction Site Inspection and Enforcement	Update construction site inspection and enforcement procedures, as needed, to adequately address TPDES permit coverage, effectiveness of control measures, compliance with local ordinances, and regulations, and necessary, follow-up inspection and enforcement actions.	Met Goal - City receives SW3P inspection report weekly and after 0.5" rainfall events. Staff visits active site on a routine basis. Staff also visits sites with issues frequently. Whenever necessary, staff enforced appropriate measures. Three (3) City staff has made approximately 200 visits in 2016.
MCM 3 BMP 13. Engineering and Construction Staff Training	Develop training procedures, including procedures to track and document training, for staff with duties related to construction permitting, plan reviews, inspections, or enforcement activities.	Met Goal - Staff has attended in numerous relevant seminars and webinars offered by different organizations. Please see Appendix 'D' which lists all those trainings.
MCM 4 BMP 14. Post-Construction Stormwater Ordinance	If necessary, begin finalizing updated ordinance for public review and comment. Solicit input from the public for the draft ordinance. Conduct education activities, as needed, to inform the public about new ordinance requirements.	Exceeded Goal- Current City Code of Ordinance contains sufficient provisions. Staff visits the site at the end of construction and then annually for 2 years to visually verify the condition of final stabilization. Furthermore, staff conducts inspections of the permanent water quality control facilities (/ponds) annually and notifies the responsible party if any maintenance is required. On the whole, we have had great success working directly with parties where short term maintenance and

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
		<p>long term improvements are required, but in instances of non-responsiveness with are equipped to proceed with enforcement through the court system. Additionally, City requires the responsible parties to conduct a functionality inspection once in every 5 years to ensure those facilities are working in intended manner and to identify if any adjustments/maintenance works are necessary to improve functionality.</p>
MCM 4 BMP 15. Development Review	<p>If needed, begin revising/developing the design review process for all planned construction projects at least one acre in size to protect stormwater quality.</p>	<p>Met Goal - Site development plan includes sheets for erosion and sedimentation control plan, temporary and permanent stabilization, water quality control plans etc. which staff review and verify prior to approval. City code requires removal of minimum 95% developed pollutant loads. Furthermore, code established a 'Water Quality Buffer Zone' paralleling each side of the waterway. Development activities are generally prohibited within that area.</p> <p>These higher standards and restrictions improve overall stormwater quality. City of Austin 'Watershed Protection Department' publishes a report on 'Environmental Integrity Index' for creeks and streams in this area. Historically, Little Barton Creek ranks in the top (2nd best in overall scores). Please see Appendix 'F' for summary of water quality analysis obtained from City of Austin Website.</p>

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
MCM 4 BMP 16. Structural Control Maintenance	Begin implementation of maintenance activities according to the developed procedures. If applicable, begin procedures for educating the public that operation and maintenance activities must be documented and retained on site to be made available for review to show compliance with long-term maintenance plans.	Exceeded Goal - Current City Code of Ordinance requires a 'Maintenance Plan' for all structural water quality control facilities. As part of annual inspection, staff visits the subject facilities, notifies the responsible parties, and enforces necessary maintenance. Identified maintenance activities are completed for most of the facilities with some currently in progress. Furthermore, City is responsible for regular maintenance of two facilities. We have a consulting civil engineering firm specializing in stormwater on retainer in the event we need a second opinion and modification to the ponds, but generally are able to handle most design/troubleshooting and maintenance in-house.
MCM 5 BMP 17. Inventory of Facilities and Stormwater Controls	Develop written procedures to identify and inventory City-owned and operated facilities and stormwater controls, including periodic updates to the inventory. Include documentation procedures to keep track of what has been inventoried.	Met Goal - City has the inventory of all publicly owned and operated facilities. City also has inventory for privately maintained stormwater quality control facilities.
MCM 5 BMP 18. Employee Training	Identify municipal operations in which activities have the potential to impact stormwater. Identify effort and method necessary to properly train affected City employees in	Met Goal - City has identified municipal operations that have potential to impact stormwater. Because our engineering staff cross-trains our maintenance staff using the same standards we apply to private development within the City and ETJ,

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
	implementing pollution prevention and good housekeeping practices.	the City's maintenance employees have adequate knowledge in implementing pollution prevention and good housekeeping practices. Both groups are in regular communication and consultation during annual maintenance and public projects as in-field questions and considerations arise.
MCM 5 BMP 19. Disposal of Collected Waste	Continue identifying sources of waste requiring disposal as part of stormwater management program activities.	Met Goal - City has properly disposed all collected waste from publicly maintained facilities and infrastructure with the assistance of its service provider.
MCM 5 BMP 20. Contractor Oversight Procedures	Develop written procedures to contractually require contractors to comply with the City's stormwater management program best management practices. Include procedures for the City to provide oversight of contractor activities and a means to document the oversight.	Met Goal – City has established procedure and practice of communicating with the contractors via e-mail and phone, and inspecting the contractor owned construction sites. By appropriate notes and permitting process, City ensures contractors to comply with stormwater related regulations and standard practices. City is currently working on developing additional documents to contractually require contractors to comply with such requirements.
MCM 5 BMP 21. Municipal Operations and Maintenance Activities	Continue developing written procedures, as needed, to perform assessments on municipal operation and maintenance activities and implementing pollution prevention measures that will reduce the discharge of pollutants into stormwater.	Met Goal – An established good housekeeping practice in place which takes into account stormwater pollution and prevention measures. City's service provider 'Texas Disposal System' collects trash/letters, pet waste from City parks and uses existing recycle station. City's service provider 'Clean Scapes' collects

MCM(s)	Measurable Goal(s)	Explain progress toward goal or how goal was achieved If goal was not accomplished please explain
	Include visual inspection procedures and documentation procedures to confirm pollution prevention measures are functioning as intended.	trash/litters from street's rights-of-way once a week and conduct mowing operation monthly. Street sweeping contractor sweep the streets on a routine and necessity basis. City conducts cleaning of storm sewer drains/culverts and drainage ditches maintenance as needed including removal of deposited sediments/trash.
MCM 5 BMP 22. Edwards Aquifer Contributing Zone	Continue to comply with the Edwards Aquifer Rule and operate according to Title 30 Chapter 213 of the Texas Administrative Code.	Met Goal – As part of development plan review, staff ensure that all construction projects are in compliance with Edwards Aquifer Rule. For projects requiring 'Contributing Zone Plan', applicant submits copy of their submission to TCEQ. City requires receiving approval letter of CZP from TCEQ prior to formal approval process.

C. Stormwater Data Summary

Provide a summary of all information used including any lab results (if sampling was conducted) to assess the success of the SWMP at reducing the discharge of pollutants to the MEP. For example, did the MS4 conduct visual inspections, clean the inlets, look for illicit discharge, clean streets, look for flow during dry weather, etc.? (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(b))

Field screening is not required for level I operator. City has not conducted any activity for sampling collection and laboratory analysis. However, staff performed dry weather visual inspections at outfalls to determine if there were illicit discharges by residents or from construction activities. Staff monitors (as part of regular site inspection) conditions in the creek downstream of any construction sites. There were no incidents of direct discharge of sediments, other illicit discharge to the creek or apparent pollutants in the water. From visual inspections, staff concludes that existing procedures are sufficiently protecting stormwater quality. Adopted and implemented procedures are successful in reducing discharge of pollutants to the water bodies.

D. Impaired Waterbodies

1. If applicable, explain below any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4's BMPs used to address the pollutant of concern: (Refer to MS4 General Permit TXR040000 Part IV Section B.2.(c))

N/A

2. Describe the implementation of targeted controls if the small MS4 discharges to an impaired water body with an approved TMDL (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)):

N/A

3. Report the benchmark identified by the MS4 and assessment activities (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(6)):

Benchmark Parameter <i>(Ex: Total Suspended Solids)</i>	Benchmark Value	Description of additional sampling or other assessment activities	Year(s) conducted
N/A			

4. Provide an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark (Refer to the MS4 General permit TXR040000; Part II Section D.4.(a)(4)):

Benchmark Parameter	Selected BMP	Contribution to achieving Benchmark
N/A		

5. If applicable, report on focused BMPs to address impairment for bacteria (Refer to the MS4 General Permit TXR040000; Part II Section D.4.(a)(5)):

Description of bacteria-focused BMP	Comments/Discussion
N/A	

6. Assess the progress to determine BMP's effectiveness in achieving the benchmark (Refer to the MS4 General Permit TXR040000; Part II.D.4.(a)(6)):

For example, the MS4 may use the following benchmark indicators:

- number of sources identified or eliminated;
- decrease in number of illegal dumping;
- increase in illegal dumping reporting;
- number of educational opportunities conducted;
- reductions in sanitary sewer flows (SSOs)
- increase in illegal discharge detection through dry screening

Benchmark Indicator	Description/Comments
N/A	

E. Stormwater Activities

Describe stormwater activities the MS4 operator plans to undertake during the next reporting year. You may use the table below (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(d)):

MCM(s)	BMP	Stormwater Activity	Description/Comments
1	1	Distribute Educational Material	- City will prepare printed and digital brochures containing stormwater quality educational information. City will distribute those materials among public employees, business owners (with help from City's Chamber of Commerce), general citizen (via home owners association and apartment management), and contractors etc. to

MCM(s)	BMP	Stormwater Activity	Description/Comments
			<p>increase awareness. In partnership with City library, city will distribute appropriate educational materials to kids and teens. Stormwater education materials will be available at City Hall. Public participation events will occur at least once a year.</p> <ul style="list-style-type: none"> - City will document educational materials distributed and public input and questions. - City will continue insisting developers for installation of manhole cover with "Drains to Creek" written on it. City will consider adopting inlet marking program subject to availability of volunteers.
1	2	Web Site	<ul style="list-style-type: none"> - City will maintain and update City's webpage for MS4 to include additional educational information. The page will continue to solicit input and feedback from the public for stormwater quality issues. - City will continue documenting public input and questions.
1/2/3	3	Stormwater Reporting Line	<ul style="list-style-type: none"> - The educational materials have the reporting line (phone and e-mail address) information to inform the public about its existence. Furthermore, City will utilize digital media to inform citizen about the reporting line. - City will continue documenting each call and dispatch to appropriate department for proper response and corrective actions. - City will continue documenting each incident with photos taken. - City will review calls to identify trends (i.e., repeated reports of illegal dumping in certain areas of the City), general needs for reporting

MCM(s)	BMP	Stormwater Activity	Description/Comments
			<p>line improvement, and areas requiring additional educational or enforcement effort to protect stormwater quality, and update the written procedures accordingly.</p> <ul style="list-style-type: none"> - City will document the total number of stormwater related calls received by the subject. - City will document the methods of publicizing and facilitating public reporting. - City will continue communicating with TCEQ and alerting them if necessary.
1	4	Waste Cleanup	<ul style="list-style-type: none"> - City will continue offering existing waste cleanup activities for bulk waste cleanup, household hazardous waste collection, park cleanup. - There will be three collection events in 2017. Exhibit B contains the event flyers. City will distribute event flyers in advance to increase participations. - City will evaluate opportunities and public receptiveness for additional waste cleanup activities. - City will document the followings - number of cleanup events, number of participants, approximate amount of collected materials etc. - City will document its public street sweeping and right-of-way cleanup program. - City will try to arrange a voluntary 'Creek cleaning' program during summer school break.

MCM(s)	BMP	Stormwater Activity	Description/Comments
2	5	Illicit Discharge Prohibition/Elimination Ordinance	<ul style="list-style-type: none"> - Staff will closely review existing ordinance in comparison with TCEQ model ordinance and will include provisions (if necessary) as part of future code updates. If necessary, City will conduct education activities to inform the public and developers/contractors about new ordinance requirements. - If any update is made to existing ordinance, City will document the date of ordinance enactment and document the method for educating the public about new ordinance requirements, if necessary. - City will continue documenting the instances of enforcement and action taken to eliminate the illicit discharge.
2	6	Storm Sewer System Map	<ul style="list-style-type: none"> - City will update the existing map to include new water quality ponds (/outfalls). City will document location of any new outfalls that discharge into waters of the U.S. - City will start collecting (private) storm sewer network layout information in order to develop a GIS map of the stormwater outfall and storm sewer drainage system of the City. City will document the source of information used to develop map.
2	7	Illicit Discharge Detection and Elimination (IDDE) Training	<ul style="list-style-type: none"> - City will continue IDDE training for personnel. - City will document the followings - training program materials, attendance lists, date(s) of training, trainer and trainer source. - City will acquire materials from different sources to develop in-house training capabilities. - Identified staff will watch videos available

MCM(s)	BMP	Stormwater Activity	Description/Comments
			from the EPA and other websites.
2	8	IDDE Response, Investigation, and Inspections	<ul style="list-style-type: none"> - City will continue to respond to complaint driven requests for investigations for illicit discharge. City will prioritize the investigation of discharges based on relative risk of pollution. - City will continue inspection of grease traps as part of building inspection. - City will continue septic system inspection. - City will document the investigation/inspection reports with the date observed, elimination method, and date resolved.
2	9	Spill Response	<ul style="list-style-type: none"> - City will continue implementation of spill response procedures and training through the Fire Department. - In case of severe spill over the highway, TXDOT and TCEQ will be notified. - City will evaluate existing spill response procedures and training, and modify as necessary to protect water quality. - City will document the following - the date of spill response events completed by the Fire Department, the type of spill, the method of cleaning spill, the date of resolution.

MCM(s)	BMP	Stormwater Activity	Description/Comments
3	10	Erosion Control Ordinance and Requirements for Site Contractors	<ul style="list-style-type: none"> - City will evaluate if any updates to existing ordinance are necessary and update in such case as part of future code update. If updated, City will conduct educational activities, as needed, to inform the public/developers and contractors about the new ordinance requirements. City will document all such activities. - City will continue checking erosion and sediment controls, soil stabilization, and BMPs through established procedures. - City will continue monitoring prohibited discharges through established procedures. - City will document instances of enforcement and action taken for erosion control, actions taken to eliminate prohibited discharges. - City will evaluate effectiveness of erosion and sediment controls, soil stabilization, and BMPs.
3	11	Erosion Control Plan Review	<ul style="list-style-type: none"> - City will document number of construction site plans reviewed. - City will document the number of plans requiring revisions for water quality impacts and site specific control measures.
3	12	Construction Site Inspection and Enforcement	<ul style="list-style-type: none"> - City will continue construction site inspection and enforcement procedures. - Staff will alert the site superintendent for preventive maintenance repairs. - City will continue documenting the inspections and enforcement activities. - City will document reason(s) for non-compliance and the follow-up inspections.

MCM(s)	BMP	Stormwater Activity	Description/Comments
3	13	Engineering and Construction Staff Training	<ul style="list-style-type: none"> - City will continue providing appropriate training to staff with duties related to the construction stormwater program. - City will document the followings - training program materials, attendance lists, date(s) of training, trainer source. - City will develop an in-house digital resource library with training materials for staffs.
4	14	Post-Construction Stormwater Ordinance	<ul style="list-style-type: none"> - City will evaluate if any updates to existing ordinance is necessary. In such case, relevant ordinance will be updated as part of future code updates. - City will document any such activity including education activities, as needed, to inform the public/developer about new ordinance requirements.
4	15	Development Review	City will evaluate if any change is necessary in current review process for construction projects and document any such change in design review process accordingly.
4	16	Structural Control Maintenance	<ul style="list-style-type: none"> - City will continue implementation of inspection and maintenance activities according to the established procedures. - City will continue procedures for educating the public that operation and maintenance activities must be documented and retained on site to be made available for review to show compliance with long-term maintenance plans. - City will continue documenting the structural control maintenance procedures and activities.

MCM(s)	BMP	Stormwater Activity	Description/Comments
5	17	Inventory of Facilities and Stormwater Controls	<ul style="list-style-type: none"> - City have an inventory of City-owned and operated facilities and stormwater controls. - City will document any new areas that need to be inventoried.
5	18	Employee Training	<ul style="list-style-type: none"> - City will continue conducting 'good housekeeping and pollution prevention training' for the municipal employees responsible for activities that may impact stormwater quality. - City will document the followings - training program materials, attendance lists, date(s) of training, trainer source.
5	19	Disposal of Collected Waste	<ul style="list-style-type: none"> - City will develop written procedures to properly dispose of collected waste materials according to water quality protection goals, including proper temporary storage of waste. - City will document the written procedures.
5	20	Contractor Oversight Procedures	<ul style="list-style-type: none"> - City will begin implementing written procedures to contractually require contractors to comply with the City's stormwater management program best management practices and to provide additional oversight of contractor activities. City will retain a copy of the written procedures. - City will document actions taken to oversee contractor activities. - City will document a copy of a contract with requirements for the contractor to comply with stormwater management program best management activities.
5	21	Municipal Operations and Maintenance	<ul style="list-style-type: none"> - City will continue developing written procedures, as needed, to perform

MCM(s)	BMP	Stormwater Activity	Description/Comments
		Activities	<p>assessments on municipal operation and maintenance activities and implementing pollution prevention measures that will reduce the discharge of pollutants into stormwater. It will include visual inspection procedures and documentation procedures to confirm pollution prevention measures are functioning as intended.</p> <p>- City will begin implementation of scheduled assessments and inspections of municipal operation and maintenance activities. City will incorporate pollution prevention measures, as recommended in the assessments and inspections.</p> <p>- City will document the followings - written procedures, date and location of assessments and inspections completed, observations and recommendations made during assessments and inspections, newly incorporated pollution prevention measures.</p>
none	22	Edwards Aquifer Contributing Zone	<p>- City will continue to comply with the Edwards Aquifer Rule and operate according to Title 30 Chapter 213 of the Texas Administrative Code.</p> <p>- City will maintain copy of City criteria related to the Edwards Aquifer Rule.</p> <p>- City will continue keeping records of CZP approval for projects.</p>

F. SWMP Modifications

1. Changes have been made or are proposed to the SWMP since the NOI or the last annual report, including changes in response to TCEQ's review.

____ Yes ☒ No

If 'Yes', report on changes made to measurable goals and BMPs (Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(e)):

MCM(s)	Measurable Goal(s) or BMP(s)	Implemented or Proposed Changes (Submit NOC as needed)
N/A		

Note: If changes include additions or substitutions of BMPs, include a written analysis explaining why the original BMP is ineffective or not feasible and why the replacement BMP is expected to achieve the goals of the original BMP.

2. Explain additional changes or proposed changes not previously mentioned (i.e. dates, contacts, procedures, annexation of land etc.):

- Annexation of land into the Bee Cave's city limits. The annexed land was inside the City's extra-territorial jurisdiction (ETJ) at the time the TPDES permit was authorized. A 'Notice of Change' form is being submitted simultaneously.

G. Additional BMPs for TMDLs and I-Plans

Provide a description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans (Refer to the MS4 General permit TXR040000 Part IV Section B.2.(f)).

BMP	Description	Implementation Schedule (Start Date etc.)	Status / Completion Date (completed, in progress, not started)
N/A			

H. Additional Information

1. Is the permittee relying on another entity to satisfy some of its permit obligations? (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(g))

☐ Yes ☒ No

If 'Yes,' provide the name(s) of other entities and an explanation of their responsibilities (add more spaces or pages if needed):

Name and Explanation:

2.a. Is the permittee part of a group sharing a SWMP with other entities?

☐ Yes ☒ No

2.b. If 'yes,' is this a system-wide annual report including information for all permittees?

☐ Yes ☒ No

If 'Yes,' list all associated authorization numbers, permittee names, and SWMP responsibilities of each member. (add additional spaces or pages if needed):

Authorization Number: _____ Permittee: _____

I. Construction Activities

1. The number of construction activities that occurred in the jurisdictional area of the MS4 (Notices of intent and site notices received; Refer to the MS4 General Permit TXR040000 Part IV Section B.2.(h)) 19

2a. Does the permittee utilize the optional 7th MCM related to construction?

☐ Yes ☒ No

2b. If 'yes,' then provide the following information for this permit year (refer to the MS4 General Permit TXR040000 Part IV Section B.2.(i)):

The number of municipal construction activities authorized under this general permit	N/A
The total number of acres disturbed for municipal construction projects	N/A

Note: Though the seventh MCM is optional, implementation must be requested on the NOI or on a NOC and approved by the TCEQ.

J. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Travis Askey Title: City Manager

Signature:  Date: 03/30/2017

Note: If this is this a system-wide annual report including information for all permittees, each permittee shall sign and certify the annual report in accordance with 30 TAC §305.128 (relating to Signatories to Reports).

Appendix A

BMP 1: Presentation Slides on Digital Message Board in City Hall

When It Rains, It Drains



Where Does Storm Water Go In Our Community?

Travels over land

Carried through municipal separate storm sewer system (MS4)

Discharges into Creeks and travel to Colorado River

Storm Water Pollutants

> Sediment	> Oil & Grease	> Bacteria
> Nutrients	> Trace Metals	> Chlorides
> Fertilizer	> Toxic Chemicals	> Pesticides

What is Stormwater: Rainwater that originates during a storm event. Portion of rainwater does not soak into the ground and generates surface runoff.

Where Does it Go?

- Stormwater runoff flows toward storm drains and into a system of underground piping
- Stormwater runoff flows directly into our creeks and rivers, **untreated and unfiltered**



Stormwater

Wastewater

Storm Drain/Curb Inlet

Outfall

HOW CAN YOU HELP?



DON'T LITTER

Put your trash in a receptacle where it can be collected. A cigarette butt on the car window will like end up in the creek.



USE FERTILIZER/PESTICIDES SPARINGLY

Overuse of fertilizers and pesticides can harm and kill the threatened and endangered species that live in the river.



STOOP AND SCOOP

Picking up your pet's waste keeps beautiful bacteria out of the rivers where we swim and where animals live.

> Asking your landscaper to avoid blowing leaves & grass clippings onto sidewalks and streets.

> Applying fertilizers, herbicides and pesticides when rain is not expected.

What You Can Do:

- ☐ Dispose materials properly
- ☐ Pick up after your pooch

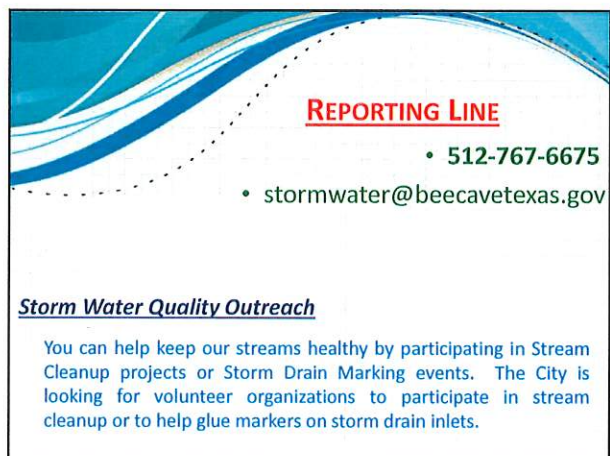
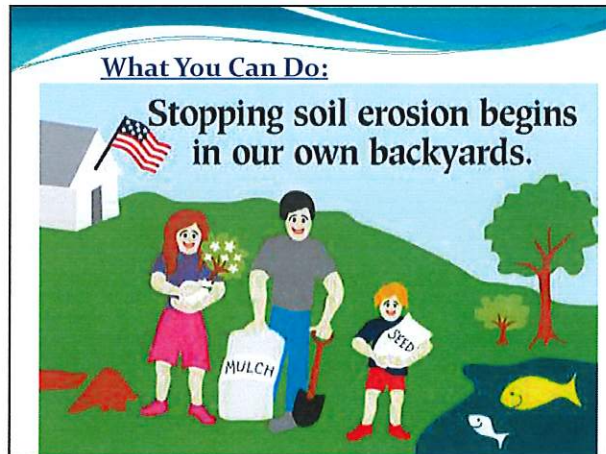



Toxic-Free Home.

Be a part of the solution. Keep your home safe.

LOVE THE LAKE

KEEP THE FISH



Appendix B

BMP 4: Waste Cleanup - Materials Collected in 2016



COLLECTION & REUSE CENTER WILL BE OPEN

Wednesday, Dec. 7 , 2016	9:00 a.m. to Noon
Wednesday, March 15 , 2017	9:00 a.m. to Noon
Wednesday, June 21 , 2017	9:00 a.m. to Noon
Wednesday, Sept. 13 , 2017	9:00 a.m. to Noon

DROP OFF HAZARDOUS HOUSEHOLD WASTE ON THE ABOVE DATES

This center is open to all utility customers of Bee Cave, Lakeway, Hurst Creek MUD, Lakeway MUD and Travis County WCID 17 **by proof of utility bill** - Drop off unwanted hazardous household products and pick up free items from the Reuse Building –

Outside customers will be charged \$40 to drop off products and are encouraged to take unwanted items to Travis County/ City of Austin Center at 2514 Business Center Drive, Austin, TX 78744, 512.974.4343

DID YOU KNOW?

FREE REMIXED LATEX PAINT (2-Gallon Pails) is available in two colors in the **REUSE BUILDING** along with a variety of **FREE** useable products for home, yard and pools!

REUSE BUILDING OPEN SAME DATE & TIMES ABOVE

Report of Household Hazardous Waste Collected

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Section A: Contact Information

Instructions: Complete contact information below, updating the program contact if needed.
Submit your report to HHW Program Manager at recycle@tceq.texas.gov

Report Contact: Deborah S. Gernes	Same as Program Contact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Address: 3812 Eck Lane	City, ZIP: 78734
Phone Number: 512 266 1111, ext. 113	Email: dgermes@wcid17.org
Program Contact: Deborah S. Gernes	New Contact? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Address:	City, ZIP:
Phone Number:	Email:

Section B: Collection Event Information

Instructions: Complete the information below for the program(s) being reported

Calendar Year Being Reported: 2016	Multiple Events or Programs Reported? <input type="checkbox"/> Yes <input type="checkbox"/> No
Event Types Included in Report: <input type="checkbox"/> Permanent Facility <input checked="" type="checkbox"/> Collection Event <input type="checkbox"/> Point-of-Generation Collection	
Name and address of permanent facility or facilities being reported for: Lake Travis Regional Reuse & Recycling Center - 3207 Neidhardt Drive, Austin, TX 78734	
Address and date of collection event(s) or community(s) for point-of-generation: Mar. 2, 2016; June 1, 2016; Sept. 7, 2016; and Dec. 7, 2016	
Material received from another HHW program during reporting year? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes" List:
Material transferred to another HHW program during reporting year? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes" List:

If you have questions on how to fill out this form or about the Household Hazardous Waste program, please contact us at 512-239-3143. Individuals are entitled to request and

Report of Household Hazardous Waste Collected

review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512-239-3282.

Section C: Collection Amounts

Instructions: Complete this section designating **pounds** collected for the following categories and their management. Note: *if materials offered for reuse were not itemized, complete as best estimate or in total pounds offered at the bottom.*

Material Type	Material Collected				Material Management			
	Permanent Facility	Collection Event (Mobile or 1-Day)	Point-of-Generation	Received from other HHW program(s)	Offered for Reuse at Event or Facility	Recycled (including energy recovery)	Disposed	Transferred to other HHW program (s)
1. Flammables	7,354				505	6,849		
2. Corrosives	2,092						2,092	
3. Oxidizers	410				13		397	
4. Pesticides, Herbicides, Fertilizers	985				324	661		
5. Batteries	1,020					1,020		
6. Automotive Fluids*	9,319**				133	9,186		
7. Oil Filters	0							
8. Paint/Paint-related	44,395***				13,086	31,309		
9. Used Electronics	0							
10. CFLs & Mercury-Containing Equipment	0							
11. Other: Aerosol Cans	886					886		
TOTAL	66,461				14,061	49,911	2,489	

To Submit Your Report **Includes 740#Cooking Oil ***Includes Latex Paint

Email this report to recycle@tceq.texas.gov by April 1 of each year.

**2016 ANNUAL REGISTRATION RENEWAL AND REPORTING FORM
FOR USED OIL COLLECTION CENTERS**

*** Please return completed form to the TCEQ by JANUARY 25, 2017 ***

If changes to the facility or owner information are made on this form, also submit a Core Data Form, TCEQ-10400

USED OIL COLLECTION CENTER FACILITY

TCEQ Registration #: C89067

Registration Expiration Date: December 31, 2016

Collection Center: LAKE TRAVIS REGIONAL REUSE AND RECYCLING CENTER

(every even year)

TCEQ Regulated Entity Number :RN108302134

TCEQ Customer Number : CN600669048

DEBORAH GERNES
TRAVIS COUNTY WCID 17
3812 ECK LN
AUSTIN, TX 78734-1613

On-site (Local) Representative/Title:

CONTACT REPRESENTATIVE

Contact: DEBORAH GERNES

Phone: (512) 266-1111

TYPE OF FACILITY

* DIY

TYPE OF WASTE ACCEPTED

* USED OIL

Used Oil collected between January 1, 2016 and December 31, 2016

Collection Center LAKE TRAVIS REGIONAL REUSE AND RECYCLING CENTER

Physical Address 3207 NEIDHARDT DR, AUSTIN, TX 78734-2260

From Household
Do-It-Yourselfers 1,069 gallonsFrom Other
Generators _____ gallonsFrom Your
Facility _____ gallons***** INTENT TO RENEW *****☒ I would like to renew my Used Oil Collection Center registration with TCEQ.**CERTIFICATION STATEMENT**

Failure to disclose to the Commission any of the required information may result in loss of state contracts, non-issuance of registration or non-renewal of registration.

I certify that the above information is true and correct to the best of my knowledge, and that I will abide by all State or Federal rules, regulations and laws governing the collection, management and recycling of used oil.

Are there any outstanding fees or penalties due to the TCEQ from this owner? If yes, provide the amount

\$ _____; nature of the fee or penalty _____; and the identifying account number _____. The registration form will not be processed until all delinquent fees and/or penalties owed to the TCEQ are paid.

Signature: Deborah GernesDate: 1/4/2017Print Name: Deborah S. Gernes, Operations Mgr.Texas Commission on Environmental Quality
Used Oil Recycling Program (MC-129)
P.O. Box 13087, Austin, Texas 78711-3087
(512) 239 - 6413**COPY**

2017/JAN/04



Call2Recycle Certificate of Recycling



Date Issued: 10/14/2016

Name : Travis County WCID

Time Period:

10/01/2015 - 09/30/2016

Location :

3812 Eck Ln

Austin, TX 78734-1613

Certificate Reference #:

165161-20161014-KKW9X

Page 1 of 2

All materials received with the provided certificate of recycling reference number during the time period above, have been received through the Call2Recycle program at the collection center listed in the receipt report. All waste materials accepted for recycling are received, analyzed and processed in accordance with receiving and processing facility permits and requirements. These waste materials are handled in a manner that adheres to applicable federal, state and local laws, ordinances, regulations and guidelines.

Call2Recycle, operated by Call2Recycle, Inc., which administers contracts for used battery and cellphone collection, transportation, consolidation, and recycling; conducts due diligence environmental audits of facilities and contractors; and manages the program compliance with environmental laws.

Carl E. Smith, CEO & President

Call2Recycle Certificate of Recycling
Travis County WCID
Certificate Reference #: 165161-20161014-KKW9X
Time Period: 10/01/2015 - 09/30/2016
Weight in lb

Page 2 of 2

Site ID	Name	City							State	Zip Code	County	Status		
165161	Travis County WCID	Austin							TX	78734-1613	Travis	Active		
Receipt Date	Total Wgt	Ni-Cd	Li-Ion	Ni-MH	SSLA	Alkaline	Lithium	Other	Facility	Ship Date	Dock Date	BOL	Transporter	Receipt ID
10/21/2015	26	17	6	0	3	0	0	0	Wislon					O6UJ9A01DLK1
10/21/2015	24	6	4	5	9	0	0	0	Wislon					O6UJ9A01DLW1
03/16/2016	45	15	12	15	3	0	0	0	Wislon					O6UJ9A01G9DY
04/13/2016	30	20	1	2	7	0	0	0	Wislon					O6UJ9A01GTL3
06/10/2016	34	34	0	0	0	0	0	0	Wislon					O6UJ9A01HQN0
06/16/2016	29	1	8	19	1	0	0	0	Wislon					O6UJ9A01HU1S
06/24/2016	35	30	0	0	3	0	0	2	Wislon					O6UJ9A01HYEL
09/23/2016	28	15	3	0	10	0	0	0	Wislon					O6UJ9A01KK19
09/23/2016	35	35	0	0	0	0	0	0	Wislon					O6UJ9A01KK0L
Total	286	173	34	41	36	0	0	2						
	Total Wgt	Ni-Cd	Li-Ion	Ni-MH	SSLA	Alkaline	Lithium	Other						
Grand Total	286	173	34	41	36	0	0	2						

*Reported
2016*



Recharging the planet. Recycling your batteries.

Run Date: 10/14/2016

Site Summary Report

Travis County WCID

Call2Recycle ID: 165161
Enrolled September 16, 2015

Store ID:
3812 Eck Ln
Austin, TX 78734-1613

Batteries / Cell Phones Collected From 10/1/2015 To 9/30/2016

Rechargeable Batteries

	Weight (lbs)
Nickel Cadmium (Ni-Cd)	173
Lithium Ion (Li-Ion)	34
Nickel Metal Hydride (Ni-MH)	41
Small Sealed Lead Acid (SSLA/Pb)	36
Total:	284

Non-Rechargeable Batteries / Cell Phones

	Weight (lbs)
Alkaline	0
Lithium	0
Other	2
Total:	2



Fully Charged!

You Last Sent a Box to Call2Recycle
On September 23, 2016.
(22 Days Ago)

For the Reporting Period You Have:

Sent in **9** Boxes

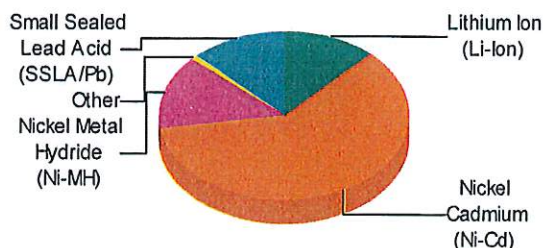
Collected a Total of **286 lbs**

Returned **0** Cell Phones

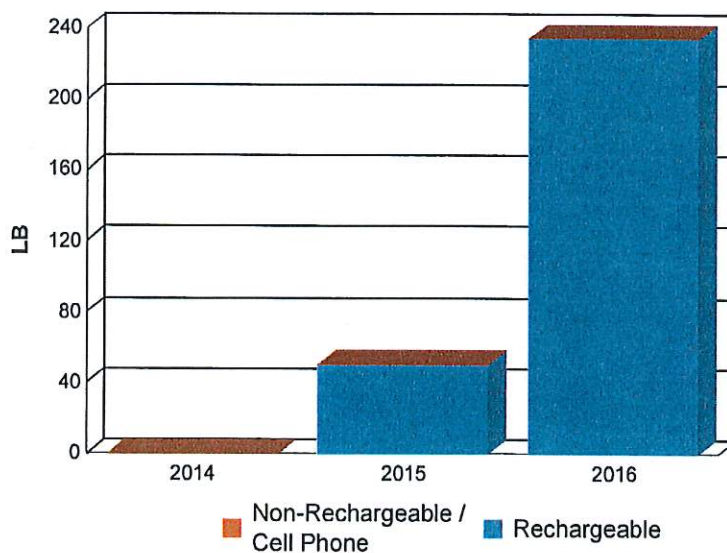
Fully Charged - You last recycled with Call2Recycle within 6 months
Time To Recharge - You last recycled with Call2Recycle between 6 months and 1 year ago
Drained - You last recycled with Call2Recycle more than 1 year ago

Collection Breakdown

Weights in lbs



3 Year Trend



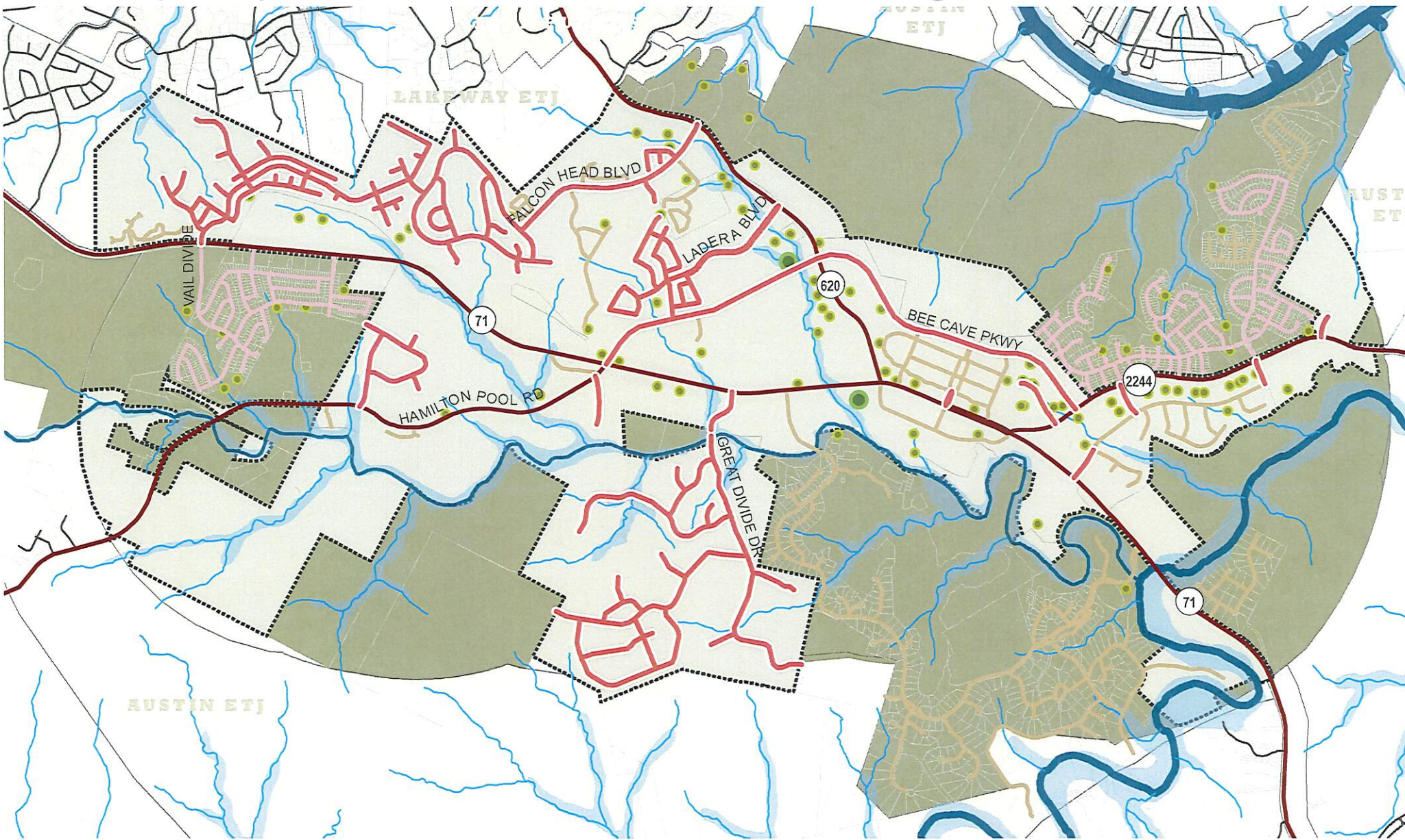
Alkaline	0.0%
Lithium	0.0%
Lithium Ion (Li-Ion)	11.9%
Nickel Cadmium (Ni-Cd)	60.5%
Nickel Metal Hydride (Ni-MH)	14.3%
Other	0.7%
Small Sealed Lead Acid (SSLA/Pb)	12.6%
Total	100.0%

Call2Recycle Account Manager: Tim Warren
twarren@call2recycle.org

Appendix C

BMP 6: City of Bee Cave Storm Sewer System (/Water Quality Ponds) Map

Water Quality Pond and Road Maintenance Obligations *as of December 31, 2016*



Pond Maintenance Responsibility ● Public ● Private*	Road Maintenance Responsibility — City of Bee Cave — TXDOT — Travis County — Private — Outside Bee Cave's Jurisdiction	◆ Bee Cave Corporate Limits ◆ Bee Cave ETJ ◆ Jurisdictions Beyond Bee Cave	— Creeks & Rivers — Colorado River — Barton Creek — Little Barton Creek ◆ 100 Year Floodplain	0 0.25 0.5 1 Miles 500 Feet	N 2.3.17
------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------	--------------------------------	-------------

*e.g. Property/Homeowners' Association
Municipal Utility District

Appendix D

BMPs 7, 13, 18: Employee Training

Appendix D: Employee Training

Employee	Seminar/Training Description	Location	Date
Stephen Myrick	Plumbing license CEUs	Marble Falls, TX	1/30/2016
Mike Polley	OSSF license CEUs	College Station, TX	3/8-10/2016
Mike Polley	NCTCOG: Stormwater Ponds Seminar	Online	4/18/2016
MD Moazzem Hossain	ASCE: Stormwater management alternatives for small commercial sites	Online	3/15/2016
MD Moazzem Hossain	ASCE: Stream restoration: What works and what does not work	Online	3/16/2016
MD Moazzem Hossain	TFMA: Managing floodplain development	Cedar Park, TX	04/11/16 - 04/14/16
MD Moazzem Hossain	EWRI-ASCE: Central Texas stormwater innovations Conference	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : TPDES Stormwater Updates	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Sustainable Drainage Design	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Waller Creek Restoration	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Highland Lakes Watershed Ordinance	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Low Impact Development Implementation in San Antonio	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Advancing Watershed Protection Through CodeNext	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : TXDOT MS4 Program	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Water Quality Protection in a Rapidly Growing City	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : State of the Practice of Urban Stormwater Management	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Urbanization and Streams in Austin, TX	Austin, TX	4/22/2016
MD Moazzem Hossain	EWRI-ASCE Workshop : Pollutant Removal in Vegetated Filter Strips	Austin, TX	4/22/2016
MD Moazzem Hossain	Forester University: Designing permeable pavements for heavy loads and lower costs	Online	4/28/2016
MD Moazzem Hossain	ASCE: Earthwork 101	Online	3/18/2016
MD Moazzem Hossain	ASCE: Dredging Fundamentals	Online	3/18/2016
MD Moazzem Hossain	FNI: Evolving approaches to evolving streams	Austin, TX	7/22/2016
MD Moazzem Hossain	Forester University: Flood best practices: Protecting people & property with GIS	Online	7/29/2016
MD Moazzem Hossain	Forester University: Go LEAN: Cutting Waste & Increasing Productivity	Online	8/10/2016
MD Moazzem Hossain	Forester University: Taking the Risk Out of Erosion Control	Online	8/17/2016
MD Moazzem Hossain	Forester University: Engineering Solutions for Sustainable Vegetation	Online	8/31/2016
MD Moazzem Hossain	Learn to Storm Water Management Model (SWMM) - EPA software	Las Vegas, NV	09/26/16 - 09/27/16
MD Moazzem Hossain	American Planning Association: Subdivision Design and Flood Hazard Areas	Online	12/19/2016

Appendix E

BMPs 8, 12: Inspection Template

General Site and Environmental Inspection

Inspection Date:

Project:

Developer:

Contractor:

Inspection performed by:



Scope: Visual inspection of condition of all existing Erosion / Sediment Controls and other BMPs identified in the ESC Plan sheets and verify controls are maintained in effective operating condition. Inspection of all other general aspects of site and standard construction practices.

Site Inspection	Y	N	N/A	Comments
a. Rainfall of ½ inch or greater in the last 72 hrs.?				
b. Signs of pollution/ discharge leaving site during inspection?				
c. Structural BMPs working properly and in good condition?				
d. Additional BMPs needed?				
e. Is trash from work areas collected and placed in dumpsters?				
f. Construction Permit Notice posted?				
g. SWPPP and inspection reports available on-site?				
h. Signs of pollution leaving material storage areas?				
i. Is sediments tracked into the street?				
j. Have any discharges occurred/reported since last inspection?				
k. Dust-control measures/Water truck on-site				
l. Tree Protection Fencing in-place				
m. Worker's safety/PPE				
n. Traffic Control in-place				

Structural and Non-structural Best Management Practices

Locations shown in ESC Plan Sheet(s)	BMP OK?			Comments
	Yes	No	N/A	
a. Stabilized Construction Entrance				
b. Silt Fence				
c. Material Storage Area / Spoils Staging Area				
d. Concrete Wash Out Area				
e. Inlet Protection				
f. Rock Berms				
g. Diversion Berms				
h. Water Quality / Detention Ponds				
i. Mulch Sock				
j. Sediment Trap /De-watering Plan				
k. Re-Vegetation/Hydro-Mulch				

General Site and Environmental Inspection

Inspection Date:

Project:

Project Start Date:

Major and Other Observations: Please see below for issues and potential solutions, location of BMP requires maintenance or that failed to operate, and location where additional BMPs are required.

Location	Corrective Action Required	Date Noted	Date Correction Noted
Site Development Phase			

Photo Log

Photo Number	Description/Comments

Please note that COBC Code of Ordinance Sec. 20.04.106 (c), following can be considered as an offense for a developer or a third party performing work on a project -

- *"Failing to install erosion control devices or to maintain erosion control devices throughout the duration of land-disturbing activities, in compliance with the approved erosion control plan for the location where the violation occurred."*
- *"Failing to remove off-site sedimentation that is a direct result of land-disturbing activities where such off-site sedimentation results from the failure to implement or maintain erosion control devices as specified in an approved erosion control plan for the location where the violation occurred."*
- *"Failing to repair damage to existing erosion control devices, including replacement of existing grass or sod."*

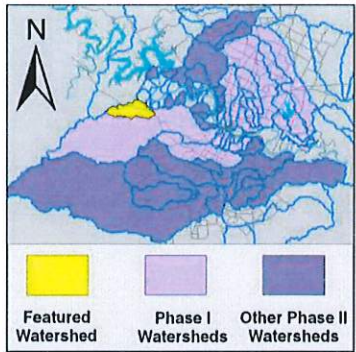
Appendix F

BMPs 5, 8, 10, 11, 12, 14, 15, 16, 17, 19, 20, 21: Little Barton Creek Water Quality

Little Barton Creek Watershed

Summary Sheet

Catchment	Total area	11.4 sq. miles				
	Area in recharge	none				
	Creek length	10 miles				
	Receiving water	Barton Creek				
Demographics	2000 population	459				
	2030 projected population	4,076				
	30 year projected % increase	788 %				
Land Use	Impervious cover (2003 estimate)	4.1 %				
	Impervious cover (2013 estimate)	9.5 %				
Overall EII Scores	2001	2004	2007	2010	2012	2014
	82	76	77	89	82	82



Flow Regime* for Sample Sites on Little Barton Creek

		Flow Regime for Damperess on River Water Level																																
Site	Site Name	1999		2001				2004					2007					2010				2011		2012				2014						
		Jan	Jan	Mar	Mar	Jun	Sep	Dec	Mar	May	May	Jun	Oct	Dec	Feb	May	Jun	Sep	Dec	Mar	May	May	Oct	Dec	Mar	May	Jul	Sep	Jan	Apr	May	Jun	Jul	Sep
		WQ	Bio	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	WQ	WQ	Bio	WQ	WQ	WQ	Bio	WQ	WQ	WQ	Bio	Bio	WQ	WQ
1115	Hamilton Pool	B	B	B	B	B	n	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	n	n	B	B	n		B	n
1114	Great Divide	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	n	B	B	n		B	n
77	BAR	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

* B = baseflow n = no flow S = storm flow blue = Samples were taken light blue = Samples were not taken blank = not visited

Index scores* for Little Barton Creek Sites by Year

Reach	Site	Site Name	Year	Water Quality	Sediment**	Contact Rec.	Non-Contact Rec.	Physical Integrity	Aquatic Life	Benthic subindex	Diatom subindex	Total EII Score
LBA1	77	Little Barton Creek @ Barton Creek	1998	78	95	95	95	73	87	77	96	87
LBA2	1114	Little Barton Creek @ Great Divide Dr	1998	76	95	92	89	89	76	61	91	86
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	1998	81	95	97	86	81	75	67	82	86
LBA1	77	Little Barton Creek @ Barton Creek	2001	64	92	87	81	71	73	73	72	74
LBA2	1114	Little Barton Creek @ Great Divide Dr	2001	68	92	94	98	89	71	61	81	81
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2001	68	92	93	88	83	70	61	79	78
LBA1	77	Little Barton Creek @ Barton Creek	2004	73	90	63	86	66	92	89	95	78
LBA2	1114	Little Barton Creek @ Great Divide Dr	2004	63	90	47	92	73	93	94	92	76
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2004	66	90	45	84	64	84	79	89	72
LBA1	77	Little Barton Creek @ Barton Creek	2007	72	85	82	94	78	71	71		80
LBA2	1114	Little Barton Creek @ Great Divide Dr	2007	66	85	66	94	81	70	79	60	77
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2007	67	85	58	88	75	60	82	37	72
LBA1	77	Little Barton Creek @ Barton Creek	2010	79	85	97	100	76	96	99	92	89
LBA2	1114	Little Barton Creek @ Great Divide Dr	2010	78	85	86	100	86	94	100	88	88
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2010	84	85	94	98	93	83	90	76	90
LBA1	77	Little Barton Creek @ Barton Creek	2012	71	87	92	88	75	100	100	100	86
LBA2	1114	Little Barton Creek @ Great Divide Dr	2012	59	87	67	72	88	97	100	94	78
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2012	60	87	75	91	83	94	90	98	82
LBA1	77	Little Barton Creek @ Barton Creek	2014	73	84	89	83	85	99	100	97	86
LBA2	1114	Little Barton Creek @ Great Divide Dr	2014	58	84	77	83	84	95	100	90	80
LBA3	1115	Little Barton Creek @ Hamilton Pool Rd	2014	68	84	75	78	82	89	92	86	79

* blank cells indicate parameter was not collected, blank row indicate site was dropped

**sediment samples only collected at the downstream site

100-87.5 Excellent 87.5-75 V. Good 75-62.5 Good 62.5-50 Fair 50-37.5 Marginal 37.5-25 Poor 25-12.5 Bad 12.5-0 V. Bad

Little Barton Creek Watershed

Land Use Map

